



DRUMS

Introduction

A drum kit (or drum set or trap set) is a collection of drums, cymbals and sometimes other percussion instruments arranged for convenient playing by a single drummer.

The individual instruments of a drum kit are struck by a variety of implements held in the hand, including sticks, brushes, and mallets. Two notable exceptions include the bass drum, played by a foot-operated pedal, and the hi-hat cymbals, which use a foot pedal in addition to the normal striking motion.

Differing music styles implement the components of a drum kit in different manners. For example, in most forms of rock music, bass drum and snare drum are the primary instruments used to create a drum beat. In jazz, however, the ride cymbal and hi-hats (or brushed snare drum and hi-hats) usually fill this role.

History

Early drum kits were known as traps (from contraption). Though this term is now uncommon, it survives in the term trap case still given to a case used to transport stands, pedals, sticks, and miscellaneous percussion instruments, still commonly called "traps."

The first drums were made differently from those that are made today. The rims of the first drums were made of wood. Later, some people started to make metal rims. Instead of drum stands, the drums were all attached to a large bass drum on metal racks. This rack also often contained a small platform for holding head bolt instruments, a precursor to today's trap table.

The first drums used calfskins for the drum heads, but they easily went out of tune when subjected to adverse weather conditions. Marion Evans invented the first plastic head in the mid-1950s, an endeavor which later



spawned the Evans drumhead company. In 1957, Remo Belli and Sam Muchnick together developed a plastic head, leading to the development of the Remo drumhead company.

Cymbals were introduced to the drum set when people found a way to hang them above the drum set. The first cymbals that people used were cheap, small, and were suspended from curtain cords. When Zildjian cymbals began to be produced in the United States in 1929, higher quality and larger cymbals were available, but they were still suspended from curtain cords. Gene Krupa, a famous drummer, finally invented a stand for the cymbals because the curtain cords could not hold the larger cymbals properly.

Modern kits and components

The exact collection of components to a drum kit varies greatly according to musical style, personal preference, financial resources, and transportation options of the drummer. 'Breakables' is a term primarily used by drummers to refer to a set of customized equipment that is part of their drum kit.

Drum set / Drum Kit - A collection of different percussion instruments generally including but not limited to bass drum, operated with a foot pedal, snare drum, cymbals, and toms. It is generally meant to be played by one person.

Snare drum – Snare is the drum that generally sits between a player's legs. A Snare drum is constructed from drum heads of Mylar, Kevlar or natural skin. Drum head sizes generally vary from 10" to 14" and depths from 3" to 12". The bottom of the drum is home to a set of wires that resonate when the top head is struck giving the distinctive snare sound. Snare drums are generally played with sticks or brushes; however mallets and rods (collections of small sticks) are also used.

TRIAUM



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Toms/Rack Toms - The small to medium/large drums that are mounted on top of, or to the side, of the Bass drum(s); sizes generally vary from 6" rack toms to 18" Floor toms in varying depths. Although there are no hard and fast rules as to tom numbers and placement in a drum set.

Bass drums - The largest of drum set items will be termed the bass drum. It is commonly referred to as 'kick drum' or simply 'kick'. The bass drum is mounted with the head vertical to the floor and is hit by a pedal operated beater. Sizes vary from 28" down to 16" generally.

Cymbals - Member of the Bell family of instruments, Circular discs of metal alloy that are shaped by various processes to provide an instrument that provides emphasis, texture, or effect. Cymbals are played with the implements described at snare drums.

Drum sticks - A drum stick or drumstick is an object used to strike drums and other percussion instruments to produce sound. Some specialized drum sticks are called beaters, mallets, or brushes. Drum sticks are usually made of wood, often hickory, oak or hard maple. Other used materials include aluminum (covered with a PVC sleeve to avoid damage to cymbals), fiberglass, nylon, acrylic, plastic, and carbon fiber. A typical drum stick is around 1.5cm in diameter and 41cm long, although drummers have a wide range of shapes and sizes to choose from. Many drummers are very particular about the exact shape, size, weight, balance, density, and grain of their sticks. All of these qualities attribute to the "feel" and sound of the stick.

The use of two bass drums in a kit can be traced back decades to jazz drummers; more recent drummers - especially in hard rock and heavy metal - have used dual bass drums. Since the 1980s, drummers have used electronic drums, either by themselves or incorporated into a standard drum set. Cowbells, gongs, tambourines and other percussion instruments are sometimes used in drum sets.



Electronic drum pads

An electronic drum is a percussion instrument in which the sound is generated by an electronic waveform generator or sampler instead of by acoustic vibration.

When an electronic drum pad is struck, a voltage change is triggered in the embedded piezoelectric transducer (piezo) or force sensitive resistor (FSR). The resultant signals are transmitted to an electronic "drum brain" via TS or TRS cables, and are translated into digital waveforms, which produce the desired percussion sound assigned to that particular trigger pad. Most new drum modules have trigger inputs for 2 or more cymbals, a kick, 3-4 toms, a dual-zone snare, (head and rim) and a hi-hat. The hi-hat has a foot controller which produces open and closed sounds with some models offering variations in-between. By having the ability to assign different sounds to any given pad, the electronic drummer has nearly unlimited potential for configuring many different sounding drum kits from one set of electronic drums. Additionally, electronic drummers can sample non-percussive sounds and use them as drum sounds, as is the case with most industrial music. Many see this as a great advantage over acoustic drums, as one can have a jazz, rock or ballad drum set by merely changing the kit selector switch on the module.

Though these innovations may help to attract serious drummers, many purists feel that electronic drum kits will never offer the same feel, nuances and playability of an acoustic set.
